



SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

under Rule 62a and/or 63 of the European Patent Convention. This report shall be considered, for the purposes of subsequent proceedings, as the European search report

Application number:
EP 21 82 11 41

Classification of the application (IPC):
H02J 50/00, H02J 50/20, H02J 50/40, H02J 50/05

Technical fields searched (IPC):
H02J

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2019363590 A1 (JAKUBOWSKI DANIEL B [US])	1-9, 14, 15
Y	28 November 2019 (2019-11-28)	11, 12
A	* abstract; figures * * paragraphs [0003], [0052] - [0088] *	10
Y	US 2018069358 A1 (MILLER GAROLD C [US] ET AL) 08 March 2018 (2018-03-08)	11, 12
	* abstract; figure 22 * * paragraphs [0079] - [0080] *	
A	US 2020067349 A1 (MOFFATT ROBERT A [US]) 27 February 2020 (2020-02-27)	10
	* abstract; figures 1, 2, 5, 8 *	

INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R. 62a, 63) has been carried out.

Claim(s) completely searchable: 1-12, 14, 15

Claim(s) not searched: 13

Reason for the limitation of the search:

[0001] The search has been restricted to the subject-matter indicated by the applicant in his letter of 16-08-2024 filed in reply to the invitation pursuant to Rule 62a(1) EPC.

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 02 October 2024	Examiner Hartmann, Martin
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CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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**ANNEX TO SUPPLEMENTARY PARTIAL
EUROPEAN SEARCH REPORT**

 Application number:
EP 21 82 11 41

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 02-10-2024
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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2019363590	A1	28-11-2019	US	2019363590 A1	28-11-2019
			US	2021066975 A1	04-03-2021
US 2018069358	A1	08-03-2018	<i>NONE</i>		
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			CN	112889200 A	01-06-2021
			EP	3841657 A1	30-06-2021
			JP	7438193 B2	26-02-2024
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			KR	20210046732 A	28-04-2021
			US	2020067349 A1	27-02-2020
			US	2020067350 A1	27-02-2020
			WO	2020041736 A1	27-02-2020